A HAIR BRUSH WITH A REMOVABLE CERMAIC HAIR PICK

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] The present invention relates to a hairbrush. More particularly, the present invention relates to a hairbrush having a hair pick that may be selectively retained in a handle of the hairbrush. Still more particularly, the hair pick is made of a suitable material to impart one or more benefits to the hair.

2. Description of the Related Art

[0002] Hair styling products are known in the art. They are available in a large variety of designs for a number of modes of styling, such as for example, hair curling. Typically, to achieve a certain desirable hair curling style, heat is employed. This heat along with hair product is applied to selective portions of the hair to achieve tight, loose, large or small curls or other styling. Hair picks are also known in the art for removing hair that aggregates on a hairbrush. Hair picks are also known for styling the hair and providing the stylist with a tool for certain applications such as for example detangling the hair, teasing the hair and overall styling of the hair. However, during the hair curling manipulating, the prior art hair picks can potentially have one or more detriments.

[0003] First, prior art hair pick are formed from a metal. When this metal hair pick is placed in proximity to the curling iron, the metal hair pick will become heated. This heated hair pick can result in potentially unintentionally heating the scalp of the individual that the stylist is working on. Moreover, the stylist may potentially have difficulty manipulating the heated hair pick.

[0004] Second, the hair pick is typically relatively smaller in size than a hairbrush and/or curling iron. If placed on a counter, or dropped during the styling, the hair pick can be potentially lost very easily. Third, prior art hair picks typically do not provide any additional styling benefits to the hair. They are merely used in one or more limited situations such as for detangling the hair. However, if the hair is very detangled, the stylist must exert more force to the hair pick to untangle the detangled hair. This results in an amount of discomfort to the hair stylist's client. In order to reduce this discomfort, the hair stylist must employ another device to assist with the entanglement of the hair. Typically, a hair stylist would utilize an ion-generating device to impart a silky texture or non-static condition to the hair and to further assist with detangling the hair. However, the manipulation of the hairbrush, the ion generating device and the hair pick is difficulty, especially simultaneously.

[0005] Accordingly, there is a need for a hair pick that eliminates one or more of the aforementioned drawbacks and deficiencies of the prior art.

SUMMARY OF THE INVENTION

[0006] It is an object of the present invention to provide a hair pick that is removably mounted in a hairbrush.

[0007] It is another object of the present invention to provide a hair pick that retains heat for application to the hair.

[0008] It is still another object of the present invention to provide a hair pick that distributes heat on the hair.

[0009] It is yet another object of the present invention to provide a hair pick that retains infrared energy and later emits the infrared energy to treat the hair.

[0010] It is still yet another object of the present invention to provide a hair pick that emits ions to treat the hair.

[0011] It is a further object of the present invention to provide a hair pick improves the texture of the hair.

[0012] It is still a further object of the present invention to provide a hair pick that is made from a ceramic material.

[0013] It is still yet a further object of the present invention to provide a hair pick that is made from a resilient base material that has a ceramic coating thereon.

[0014] The above and other objects, advantages and benefits of the present invention will be understood by reference to the detailed description provided below and the accompanying drawings.

DESCRIPTION OF THE DRAWINGS

[0015] Fig. 1 is a perspective view of a hairbrush having a handle with an aperture and a removable hair pick being disposed in the aperture.

[0016] Fig. 2 is a perspective exploded view of a preferred embodiment of a hairbrush and a removable ceramic pick.

[0017] Fig. 3 is a cross sectional view of the handle of the hairbrush of Fig. 1 with the ceramic hair pick being in the handle.

[0018] Fig. 4 is a side view of the ceramic hair pick of Fig. 3 being detached from the handle.

[0019] Fig. 5 is a side view of another embodiment of the hair pick of Fig. 3 being detached from the handle.

[0020] Fig. 6 is a side view of still another embodiment of the hair pick of Fig. 3 being detached from the handle.

DETAILED DESCRIPTION OF THE INVENTION

[0021] Referring to the drawings and, in particular, Fig. 1, there is provided a hair styling assembly of the present invention generally represented by reference numeral 10. The hair styling assembly 10 has a brush 12. The brush 12 is shown in a preferred embodiment as a round vented brush of a generally elongated cylindrical shape. However, one skilled in the art should appreciate that the hair styling assembly 10 may be used with a round brush, a cylindrical shaped brush, a flat hairbrush, a paddle brush, a spinning brush, a half round brush, a vent brush, a comb, an all purpose comb, a wide toothed comb, a teasing comb, a rat tailed comb, a detangling comb and any other hair styling device or hair styling apparatus known in the art.

[0022] One skilled in the art should appreciate that brush 12 has a brush head 16. The brush head 16 may be formed in a variety of diameters. Preferably, the smaller the diameter, the tighter the curl of the hair. Relatively narrow diameters are especially effective for creating curls while conversely relatively larger diameters create looser curls. The brush head 16 is extends about half way on the hair styling assembly 10 from an end to about a midpoint on the hair styling assembly. The brush head 16 has a length suitable to comb or style hair in a comfortable manner and further to have an adequate number of bristles 14 disposed in surrounding fashion thereon.

[0023] The brush head 16 has a sleeve 18. The sleeve 18 is disposed around the brush head 16 in concentric

relation to the brush head. Preferably, the sleeve 18 is formed from a thermally conductive material such as metal, copper, aluminum, or steel. However, one skilled in the art should appreciate that the sleeve 18 may be made from any thermally conductive material known in the art. Although, the sleeve 18 is shown as completely surrounding the brush head 16, alternatively the sleeve may only surround a radial portion of the brush head such as three quarters of the brush head, half of the brush head or a quarter of the brush head. Due to the thermally conductive nature of the sleeve 18, the sleeve is preferably heated upon contact with heated air from a heat source such as a hair dryer. In this manner, the sleeve 18 is heated and the brush head 16 may assist with curling the hair being brushed to form one or more curls.

[0024] The sleeve 18 has a number of apertures 20 being disposed therethrough. Preferably, a number of bristles 14 extend outwardly opposite the brush head 16 through the number of apertures 20. The number of apertures 20 preferably facilitate drying of the hair when using the hair styling assembly 10 with the hair dryer. The number of apertures 20 preferably permit the heated air to traverse through the sleeve 18 and out the opposite side of the brush head 16 to contact and dry the hair that is being brushed on the opposite side. This decreases an amount of time necessary to dry the hair as the number of apertures 20 facilitate the circulation of the heated air relative to an instance where the brush head 16 blocks an air flow path. Here, the path of the heated air traverses through a front side of the sleeve 18 and out a rear side of the sleeve.

[0025] The number of bristles 14 may be boar's head bristles, nylon bristles, heat resistant bristles or any other suitable material known in the art for brushing the hair in a comfortable manner. The number of bristles 14 are arranged, as shown in Fig. 1, extending in all directions, preferably three hundred and sixty degrees surrounding the brush 12. Preferably, this brush 12 and the number of bristles 14 are used during the various stages of blow-drying.

[0026] The hair styling device 10 has a handle 22. The handle 22 is preferably an elongated cylindrical member removably or fixedly connected, preferably fixedly, to the brush head 16 and is lightweight to allow manipulation of the brush head. Although, shown as generally cylindrical, one skilled in the art should appreciate that the handle 22 may be generally rectangular or have any other shape known in the art. The handle 22 has an interior space 24 with a volume as shown in Fig. 2.

[0027] Referring to Fig. 2, there is shown a hair pick being detached from the hair styling device 10. The handle 22 has a length 26 and a diameter 28. The length 26 and diameter 28 of the handle 22 are suitably sized to be capable of being grasped by the stylist. The diameter 28 is preferably measured from an inner surface of an aperture 38. The handle 22 is shown as being formed from a resilient material such as wood. Alternatively, the handle 22 may be formed from any material being known in the art such as a thermoplastic, a thermoset, a polymer material, a metal, steel, aluminum or any combinations thereof.

Preferably, the handle 22 has a distal side 30 and a proximal side 32 being opposite the distal side. Preferably, the brush head 16 is connected to the handle 22 at the proximal side 32. In this embodiment, the handle 22 has a bulbous feature 34 at the proximal side 32 that allows a thumb to rest thereon. The bulbous feature preferably is aesthetically pleasing. However, one skilled in the art will appreciate that the proximal side 32 of the handle 22 may be shaped in any manner known in the art.

[0028] The distal side 30 of the handle 22 further has an end 36. The end 36 preferably has the aperture 38, preferably a circular aperture therein. The aperture 38 permits access to the interior space 24 of the handle 22.

[0029] Referring to Fig. 3, the interior space 24 has a length 40. The length 40 preferably extends about halfway up the length 26 of the handle 22 as shown in Fig. 2. However, one skilled in the art should recognize that the interior space 24 is of a suitable size to fit a longitudinal member therein.

[0030] The hair styling device 10 further has a hair pick 44. The hair pick 44 is preferably an elongated cylindrical member having preferably a dual function. First, the hair pick 44 preferably allows the stylist to remove stray hair that aggregates on the number of bristles 14 on the brush head 16 shown in Figs. 1 and 2. In this manner, the hair pick 44 may be grasped by the user, removed from the interior space 24, and manipulated such that the aggregated stray hair is removed from the brush head 16.

[0031] Second, the hair pick 44 may be used for styling purposes such as detangling the hair and simultaneously imparting one or more styling benefits to the hair. Preferably, the hair pick 44 improves the hair texture during a styling operation such as hair drying, hair curling, hair brushing, hair washing, hair teasing, or combing. Additionally, the hair pick 44 may act as a comb to straighten tangled hair. Still further, the hair pick 44 may be formed from a suitable material to retain heat, ions, infrared radiation and impart that energy to improve the hair texture.

[0032] Referring again to Fig. 3, the hair pick 44 is preferably selectively engageable and disengagebale in the hair styling assembly 10. The hair pick 44 preferably has a complementary width 46 relative to the diameter 28 of the aperture 38 of the interior space 24. In this manner, the hair pick 44 fits in the aperture 38 and is selectively retained in the interior space 24 of the handle 22.

[0033] In an exemplary embodiment of the present invention, the hair pick 44 has a hair pick handle 48, a staff portion 50, and a bulbous gripping member 52. The hair pick handle 48 is preferably a cylindrical shaped member having a hair pick handle diameter or width 46 being shown in Fig. 3. The hair pick handle 48 is preferably connected between the staff portion 50 and the bulbous gripping member 52. The hair pick handle 48 preferably has the width 46 that is greater than a diameter of the staff portion 50.

[0034] Preferably, the hair pick handle 48 further has a sheath 56 that is disposed around the hair pick handle. The sheath 56 is preferably has a higher coefficient of friction relative to the hair pick handle 48 so that the sheath rubs up against the interior space 24 of the handle 22. Thus, the hair pick 44 can be retained against an interior wall or surface of the interior space 24 of the handle 22 and will not fall out of the handle for storage purposes when not in use during, for example, styling.

[0035] The sheath 56 is preferably an elastomeric material such as a thermoplastic elastomer, a polyurethane material, rubber, or any combinations thereof. However one skilled in the art should appreciate that the sheath 56 may be any material known in the art to facilitate gripping of the hair pick handle 48, the bulbous gripping member 52, the staff portion 50 and also simultaneously grip the interior wall of the interior space 24. The sheath 56 preferably also has a number of grooves 58 being disposed thereon. The number of grooves 58 are arranged as a series of spaced circular shaped furrows or channels that extend entirely along a circumference of the sheath 56. However, one skilled in the art should appreciate that the number of grooves 58 may be in any pattern or configuration to facilitate gripping of the hair pick handle 48.

[0036] Additionally, the sheath 56 preferably is formed from a thermally nonconductive material. Preferably, the hair pick 44 is typically involved in styling hair using for example a curling iron or a hair dryer both that emit heat. This may cause the hair pick 44 to become heated and remain hot and difficult to hold. The

sheath 56 is preferably formed from a thermally nonconductive material and preferably surrounds the hair pick handle 48. Thus, the sheath 56 protects the fingers of the stylist that grips the hair pick 44.

[0037] The hair pick handle 48 is preferably connected to the bulbous gripping member 52 at an end opposite the staff portion 50. Preferably, the bulbous gripping member 52 is spherical in shape and has a diameter 60. The diameter 60 is about the same as the hair pick handle diameter or width 46. Preferably, the bulbous gripping member 52 has substantially the same size as that of the hair pick handle 48 and facilitates the initial removal of the hair pick 44 from the interior space 24 of the hair styling assembly 10.

[0038] Referring to Fig. 4, the hair pick handle 48 narrows in width and is further integrally connected to the staff portion 50 opposite the bulbous gripping member 52. The staff portion 50 is preferably a generally elongated member having a tip 62. The tip 62 preferably is a pointed end of the staff portion 50 opposite the hair pick handle 48 and also opposite the bulbous gripping member 52. Preferably, the tip 62 and the staff portion 50 are both resilient members and are suitable to detangle hair while simultaneously provide styling benefits to the client.

[0039] The staff portion 50 further has an intermediate portion 64 with a width 66. The width 66 of the staff portion 50 at the intermediate portion 64 is relatively wider than that of a width of the tip 62 or an end opposite the tip connected to the hair pick handle 48.

This width 66 facilitates detangling the hair and simultaneously styling attributes of the hair pick 44.

[0040] An exemplary feature of the present invention is that the hair pick 44 is made from a suitable material to absorb energy emitted from hair styling devices and further retain and impart this energy to the hair to be treated.

[0041] In one embodiment of the present invention, the hair pick 44 is formed from a solid ceramic material. Preferably, the hair pick 44 may be made from the solid ceramic material or alternatively a resilient base material, such as a metal or a plastic being coated with a ceramic carrying paint. In a preferred embodiment of the present invention, the ceramic carrying paint is selected for optimal heat absorption and is selected for optimal conductivity. Preferably, the ceramic carrying paint is further selected for other parameters such as cost, and durability that are also weighed in addition to the optimal heat absorption and optimal conductivity. In this ceramic carrying paint embodiment of the hair pick 44, preferably smaller particles of ceramic material are contained in the ceramic carrying paint. These relatively smaller particles of ceramic material in the ceramic carrying paint allow for a relatively higher concentration of ceramic material to be contained in the ceramic carrying paint relative to an instance of where larger particle are used. Preferably, a smaller particle size of the ceramic material in the ceramic carrying paint further minimizes granularity or a surface roughness of an outer surface of the hair pick 44. This minimal surface roughness is preferred and results in

a smooth outer surface to the hair pick 44 that aids in hair styling and texture of the hair. Preferably, the ceramic material absorbs heat from, for example, a hair dryer or a curling iron and retains this heat for an extended period of time relative to the instance of the metal hair picks. Preferably, the heated hair pick 44 will assist in styling of the hair and for example facilitate detangling and drying of the hair.

[0042] Referring to Fig. 5, in another exemplary embodiment of the present invention, the hair pick 44 may be formed from a resilient base material 68. The resilient base material 68 has a ceramic coating 70 disposed thereon. The ceramic coating 70 is preferred since a ceramic coating has superior characteristics for heat retention and heat distribution relative to the resilient base material 68. Thus, the ceramic coating 70 improves the styling of the hair to be treated.

[0043] In another embodiment, of the present invention, the hair pick 44 is formed from a ceramic material and retains ions. The ions are generated from a suitable ionic generating device (not shown) that preferably is separate from the hair styling assembly 10 and hair pick 44. The excess generated ions are transferred to the hair pick 44 by physical contact between the hair pick and the ionic generating device. The ions on the hair pick 44 are then transferred from the hair pick to the hair by a second physical contact between the hair pick and the hair. This facilitates an improved texture of the hair and assists, for example, in detangling purposes.

[0044] In another embodiment of the present invention, the hair pick 44 has one or more portions of the hair pick 44 that are made from a ceramic material. These one or more portions preferably retain infrared radiation for application to the hair to be treated or styled. The infrared energy is generated from a suitable infrared generating device that is separate from the hair styling assembly 10 and the hair pick 44. The infrared energy is transferred to the hair pick 44 by a suitable manner. The infrared energy retained in the hair pick 44 is then transferred from the hair pick to the hair by physical contact between the hair pick and the hair. This results in improved benefits to the hair such as, for example, an improved hair texture.

[0045] In another exemplary embodiment of the present invention shown in Fig. 6, the hair pick 44 may only have the tip 62 coated with the ceramic coating 70. In another alternative embodiment, the staff portion 50 of the hair pick 44 may be coated with the ceramic coating 70. Still further, the hair pick handle 48 may be formed from a resilient material such as a metal and the remainder of the hair pick may be formed with the ceramic material or may be coated with the ceramic coating 70. This may reduce the costs associate with manufacture of the hair pick 44. One skilled in the art should appreciate that remaining portions of the hair pick 44 that are not coated may be formed from any suitable material that can withstand the high temperatures that are associated with the ceramic coating process. For example, the hair pick 44 may be formed from a metal material, steel, aluminum or any another material known in the art.

[0046] It should be understood that the foregoing description is only illustrative of the present invention. Various alternatives and modifications can be devised by those skilled in the art without departing from the present invention. Accordingly, the present invention is intended to embrace all such alternatives, modifications and variances.